

## Untreated Ear Infection Can Cause Hearing Loss

As part of the National Hearing Health for Life Month the doctors at the Ear Nose Throat and Allergy Center are doing their part to educate the public on various hearing issues. This is the third article in a four part series.

October 10, 2006 (Claremore, OK) "Every year, over 10 million children in the United States are treated for ear infections," stated Dr. Mark Welch of Ear Nose Throat & Allergy center in Claremore and Owasso. According to the National Institute on Deafness and Other Communication Disorders, seventy-five percent of children experience at least one episode of otitis media by their third birthday. Almost half of these children will have three or more ear infections during their first three years. It is estimated that medical costs and lost wages because of otitis media amount to \$5 billion\* a year in the United States. Although otitis media is primarily a disease of infants and young children, it can also affect adults.

Welch explained, "Otitis media, commonly known as an ear infection, is an infection or inflammation of the middle ear. This inflammation often begins when viral or bacterial infections that cause sore throats, colds, or other respiratory or breathing problems spread to the middle ear. Bacteria reach the middle ear and can then produce infection, leading to the formation of a thick yellowish-white fluid in the middle ear."

As the fluid increases, the child may have trouble hearing because the eardrum and middle ear bones are unable to move as freely as they should. As the infection worsens, many children also experience severe ear pain. Too much fluid in the ear can put pressure on the eardrum and eventually tear it.

"Ear infections not only cause severe pain but also, if it is not treated, may result in serious complications. Untreated infections can travel from the middle ear to the nearby parts of the head, including the brain," said Dr. Welch. He then added, "Although the hearing loss caused by ear infections is usually temporary, untreated otitis media may lead to permanent hearing impairment."

Kym Claborn, Certified Speech Therapist told us, "Persistent fluid in the middle ear and chronic ear infections can reduce a child's hearing at a time critical for speech and language development. Children who have early hearing impairment from frequent ear infections are likely to have speech and language disabilities."

Children are more likely to suffer from ear infections than adults because their immune systems are still developing, causing them to have more trouble fighting infections. Another reason has to do with the child's Eustachian tube, the small tube responsible for ventilating the middle ear. When this

tube is blocked fluid begins to accumulate. Adenoids are also larger in children. Adenoids are composed of cells that help fight infections. Enlarged adenoids can interfere with the Eustachian tube opening. In addition, adenoids may themselves become infected, and the infection may spread into the Eustachian tubes.

Otitis media is often difficult to detect. Dr. Mark Welch suggested parents look for common signs such as: unusual irritability, difficulty sleeping, tugging or pulling at one or both ears, fever, fluid draining from the ear, loss of balance, unresponsiveness to quiet sounds or other signs of hearing difficulty.

Children who are cared for in group settings, as well as children who live with adults who smoke cigarettes, have more ear infections. A child who is prone to ear infections should avoid contact with sick playmates and environmental tobacco smoke. Infants who nurse from a bottle while lying down also appear to develop ear infections more frequently. Children who have been breast-fed often have fewer episodes of otitis media.

“Although many parents want to self medicate, research has shown that cold and allergy medications such as antihistamines and decongestants are not helpful in preventing ear infections,” stated Welch.

The simplest way to detect an active infection in the middle ear is to see a physician. There are several ways that the physicians at the Ear Nose Throat & Allergy Center checks for middle ear fluid. Physicians may also suggest a hearing test for a child who has frequent ear infections to determine the extent of hearing loss.

Antibiotics are often used to cure an ear infection. If the infection persists, the doctor may recommend additional medications or minor surgery. Otitis media is generally not serious if it is promptly and properly treated. With the help of your physician, you and your child can feel and hear better very soon. Be sure to follow the treatment plan, and see your physician until he/she tells you that the condition is fully cured.

“If you suspect your child may have an ear infection, don’t wait until they are screaming at the top of their lungs in the middle of the night. It is easier on you and your baby to call the office and schedule an appointment before the pain gets too persistent and the results become permanent,” Dr. Mark Welch said in closing.

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